THE

# PROCEEDINGS

OF THE

# ROYAL

# ENTOMOLOGICAL SOCIETY

OF

# LONDON

Series A.

## GENERAL ENTOMOLOGY

VOL. 24

LONDON:

PUBLISHED BY THE SOCIETY AND

SOLD AT ITS ROOMS, 41, QUEEN'S GATE, S.W.7

1949

PRINTED IN GREAT BRITAIN BY
ADLARD AND SON, LIMITED,
BARTHOLOMEW PRESS,
DORKING, SURREY

# CONTENTS


PAGE

BRADFORD, MISS B., M.Sc. The external features of the larva of *Anomala vetula* Wiedemann (Coleoptera, SCARABAEIDAE) . . . . . 67

CONDER, P. J. Observations on a migration of *Pieris brassicae* L. at Skokholm Island, Pembrokeshire, in August, 1947 . . . . . 35

CUMBER, R. A., B.Sc.(N.Z.), Ph.D., D.I.C., F.R.E.S. Larval specific characters and instars of English BOMBIDAE . . . . . 14

CUMBER, R. A., Ph.D. Humble-bee parasites and commensals, found within a thirty mile radius of London . . . . . 119

FRASER, LT.-COL. F. C., I.M.S. (Retd.), F.R.E.S. The nymph of *Ischnura pumilio* Charpentier (Odonata) . . . . . 46

HAFEZ, M., M.Sc., Ph.D., F.R.E.S. Observations on the biology of some coprophagous BORBORIDAE (Diptera) . . . . . 1

HICKIN, N. E., Ph.D., F.R.E.S. Larvae of the British Trichoptera : 27 . . . . 56

JACOB, F. H. A study of *Aphis sambuci* L. (Hemiptera, APHIDIDAE) and a discussion of its bearing upon the study of the " Black Aphids "—Part I . . . . . 90

JACOB, F. H. A study of *Aphis sambuci* L. (Hemiptera, APHIDIDAE) and a discussion of its bearing upon the study of the " Black Aphids "—Part II . . . . 99

JOHNSON, C. G., D.Sc., and SOUTHWOOD, T. R. E., F.R.E.S. Seasonal records in 1947 and 1948 of flying Hemiptera-Heteroptera, particularly *Lygus pratensis* L., caught in nets 50 ft. to 3,000 ft. above the ground . . . . . 128

KENNEDY, JOHN S., M.Sc., Ph.D., F.R.E.S. A preliminary analysis of oviposition behaviour by *Locusta* (Orthoptera, ACRIDIDAE) in relation to moisture . . 83

LAIRD, M., M.Sc. Notes on the nest-building of a solitary wasp, *Eumenes latreilli petiolaris* Schulz, 1903, at Jacquinot Bay, New Britain (Hymenoptera) . . 26

LAIRD, M., M.Sc. A migration of *Papilio browni* (Lepidoptera) observed at Jacquinot Bay, New Britain . . . . . 32

LEWIS, D. J., M.A., F.R.E.S. Tracheal gills in some African Culicine mosquito larvae 60

LEWIS, D. J., F.R.E.S., and KIRK, R. The zoogeography of the Ethiopian species of *Phlebotomus* Agassiz (Diptera : PSYCHODIDAE) . . . . . 51

MILLER, N. C. E., F.R.E.S., F.Z.S., F.E.S.S.A. A note on *Palophus tiaratus* St. (Orthoptera-PHASMIDAE) from Southern Rhodesia . . . . . 11

MORGAN, MRS. M. JOAN, M.Sc., F.R.E.S. Notes on the morphology of some species of TANYPODINAE (Diptera : CHIRONOMIDAE) . . . . . 39

RICHARDS, O. W., M.A., D.Sc. The relation between measurements of the successive instars of insects . . . . . 8

RICHARDS, O. W., M.A., D.Sc. The significance of the number of wing-hooks in bees and wasps . . . . . 75

SEVASTOPULO, D. G., F.R.E.S. Notes on four Indian Bombycid species . . . 6

STROYAN, H. L. G., M.A., F.R.E.S. The occurrence and dimorphism in Britain of *Metopeurum fuscoviride* nom. n. (*Pharalis tanaceti* auct. nec. L. (Hemiptera, APHIDIDAE) . . . . . 79

UVAROV, B. P., C.M.G., D.Sc., F.R.E.S. The migratory locust in England in 1947 and 1948 . . . . . 20

WOODWARD, T. E., M.Sc.(N.Z.), Ph.D.(Lond.), D.I.C., F.R.E.S. The internal male reproductive organs in the genus *Nabis* Latreille (NABIDAE: Hemiptera—Heteroptera) . . . . . 111

BOOK NOTICES.

*Manley.* Bee keeping in Britain, 1948 . . . . . 5

*Newman.* Butterfly haunts, 1948 . . . . . 5

*Snyder.* Our enemy the termite, 1948 . . . . . 7

*Pierce.* The songs of insects, with related material on the production, detection and measurement of sonic and supersonic vibrations, 1948 . . 13

*Stokoe and Stovin.* The caterpillars of British moths, including the eggs, chrysalids and food-plants, 1948 . . . . . 19

*Jary.* Good control of insect pests, 1948 . . . . . 45

*Ross.* A textbook of entomology, 1948 . . . . . 82

*Baerg.* Introduction to applied entomology, 1949 . . . . . 89

GENERAL INDEX . . . . . 131